

What Is Claimed Is:

First At

5 A method of manufacturing a fuel injector comprising:
providing a clean room;
fabricating a fuel tube assembly in the clean room;
fabricating an armature assembly in the clean room;
fabricating a seat assembly in the clean room;
assembling a fuel group by performing the following processes in the order

recited:

10 inserting an adjusting tube into the fuel tube assembly;
inserting a biasing element into the fuel tube assembly;
inserting the armature assembly into the fuel tube assembly; and
connecting the seat assembly to the fuel tube assembly; and
inserting the fuel group into a power group outside the clean room.

15 2. The method according to claim 1, wherein fabricating the fuel tube assembly comprises
fixedly connecting an inlet tube to a magnetic pole piece.

3. The method according to claim 1, wherein fabricating the fuel tube assembly comprises
fixedly connecting a magnetic pole piece to a non-magnetic shell.

4. The method according to claim 1, wherein fabricating the fuel tube assembly comprises
fixedly connecting a non-magnetic shell to a valve body.

5. The method according to claim 1, wherein fabricating the armature assembly comprises
fixedly connecting a magnetic armature to a preferably non-magnetic sealing element.

6. The method according to claim 5, further comprising fixedly connecting an armature tube
between the magnetic armature and the sealing element.

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7. The method according to claim 1, wherein fabricating the seat assembly comprises fixedly connecting a sealing element guide to a valve seat.
8. The method according to claim 1, further comprising installing a filter into the fuel tube assembly.
9. The method according to claim 8, wherein the filter is fixedly connected to the adjusting tube.
10. A method of assembling a fuel group comprising:
 - providing a clean room;
 - fabricating a fuel tube assembly in the clean room;
 - fabricating an armature assembly in the clean room;
 - fabricating a seat assembly in the clean room;
 - assembling the fuel group by performing the following processes in the order recited:
 - inserting an adjusting tube into the fuel tube assembly;
 - inserting a biasing element into the fuel tube assembly;
 - inserting the armature assembly into the fuel tube assembly; and
 - connecting the seat assembly to the fuel tube assembly.
11. The method according to claim 10, wherein the fabricating of an armature assembly further comprises setting an injector lift height.
12. The method according to claim 10, wherein fabricating the fuel tube assembly comprises fixedly connecting an inlet tube to a magnetic pole piece.
13. The method according to claim 10, wherein fabricating the fuel tube assembly comprises fixedly connecting a magnetic pole piece to a non-magnetic shell.

14. The method according to claim 10, wherein fabricating the fuel tube assembly comprises fixedly connecting a non-magnetic shell to a valve body.
15. The method according to claim 10, wherein fabricating the armature assembly comprises fixedly connecting a magnetic armature to a preferably non-magnetic sealing element.
16. The method according to claim 15, further comprising fixedly connecting an armature tube between the magnetic armature and the sealing element.
17. The method according to claim 10, wherein fabricating the seat assembly comprises fixedly connecting a sealing element guide to a valve seat.
18. The method according to claim 10, further comprising installing a filter into the fuel tube assembly.
19. The method according to claim 19, wherein the filter is fixedly connected to the adjusting tube.
20. The method according to claim 16, wherein the armature tube is non-magnetic.